

# Enders Reservoir

## 2010 Survey Summary



Nebraska Game and Parks Commission

Jared Lorensen, Fisheries Biologist

In 2010, Enders made a good showing with high numbers of walleye and white bass. Walleye angling opportunities in 2011 should be comparable to that experienced in 2010. Angling for white bass should be comparable to the past couple years with numbers remaining stable and a similar abundance between 12-15" and a large proportion within 9-12". Standard survey catch rate data for channel catfish continues on a downward slope but anglers have reported good success. Wiper numbers were down due to decreased stocking rates but some sizable individuals remain.

Take notice of fishing regulation changes at Enders. The channel catfish daily bag limit as of January 1, 2011 is five and the possession limit is ten. Access the 2011-2012 fishing guide at <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf> or pick up a print copy at your local vendor or NGPC office.

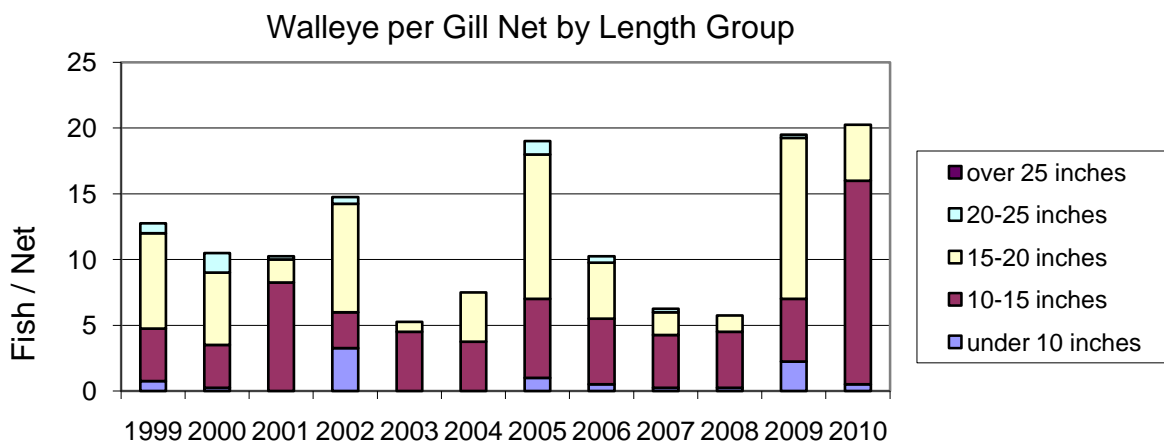
Smallmouth bass and muskellunge populations are additional components of the Enders fishery. Smallmouth bass can be caught throughout the year along the dam and rocky points. Muskellunge were introduced to Enders in 2006 and have grown to lengths greater than 30 inches. Approximately 750 – 12" muskellunge were stocked on March 25, 2011.

Cedar tree brush piles were placed underwater at Enders on March 16, 2011. Two piles were created along the east shoreline on both sides of the most protruding (currently) point south of the boat ramp area at approximately coordinates N 40°25.996' / W 101°31.539' and N 40°26.251' / W 101°31.518'. These 170 cedar trees may concentrate popular species such as white and black crappie and largemouth bass.

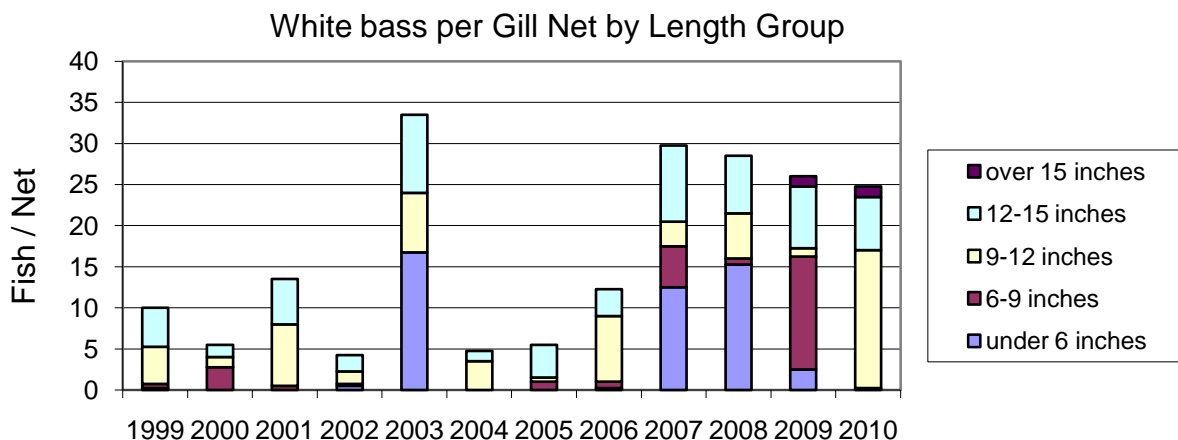


The following text and graphs describe the total number of species caught per gill net and the relative abundance of fish within several length categories. For comparative purposes it also shows results from previous years. Fish populations are sampled at Enders using gill nets, a method commonly used to sample fish found primarily in open water, such as walleye and white bass. These nets are set on approximately the same date and location each year to reduce variability and allow for trend comparisons of species abundance and size distributions. Environmental factors can play a role in catch rate and composition. Also included are graphs depicting water storage, master angler awards and graphs comparing Enders survey data to other Southwest Reservoirs.

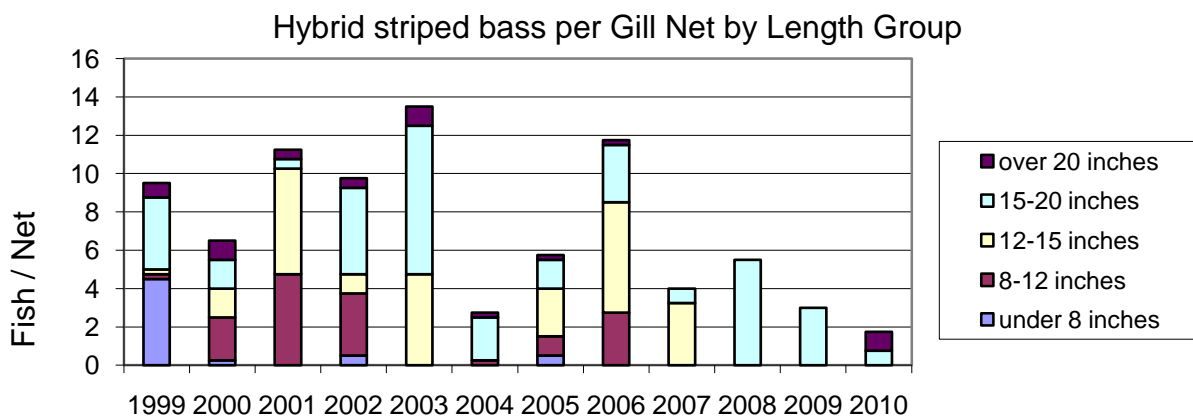
In addition to the standard gill net surveys, an angler survey conducted from April through October during recent years at Enders has gathered information on angling pressure, fish harvested and released, time spent fishing and species sought. The angler survey was administered by Nebraska Game & Parks Commission along with the Nebraska Cooperative Fish and Wildlife Research Unit. Angler surveys are conducted to assess the outcome of current fishery management strategies and to detail angler demographics. Basic findings are presented.



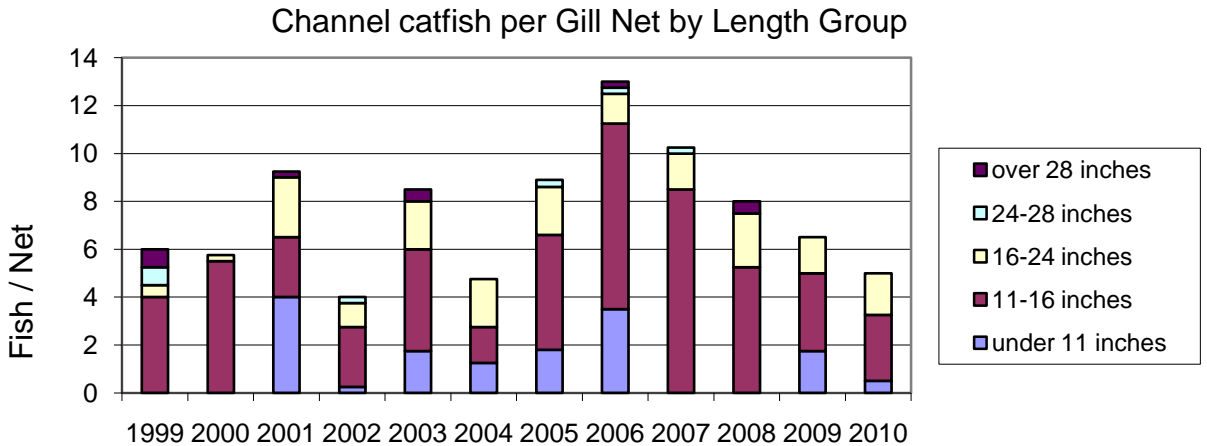
Walleye catch rate in 2010 was similar to 2009 except for a larger abundance of shorter fish. Mean length of sampled walleye was 13.3 inches. Many of these 10-15 inch fish may be legal (>15") in 2011 but many others will still be sublegal (<15"). The large sample of 10-15" walleye should mean the continuation of good walleye fishing. Approximately 1,637,506 walleye fry were stocked April 22, 2011.



The 2010 catch rate of white bass was similar to that observed in 2009 except for a much larger abundance of 9-12" individuals. The abundant 6-9 inch white bass seen in 2009 have grown to 9-12 inches in 2010. In 2010, mean length of white bass sampled was 11.6 inches compared to 9.4 inches observed in 2009.

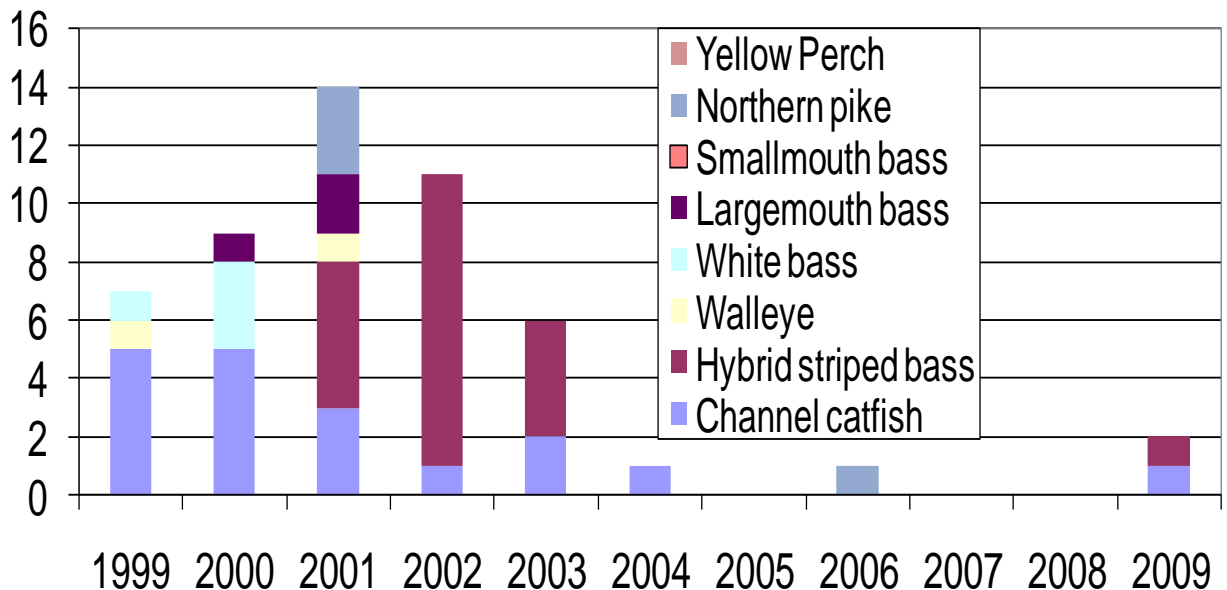


Catch rate of hybrid striped bass was slightly lower in 2010 than in 2009. Large hybrids exist with an observed mean length of 20" in 2010. Hybrid striped bass have not been stocked into Enders since 2005.



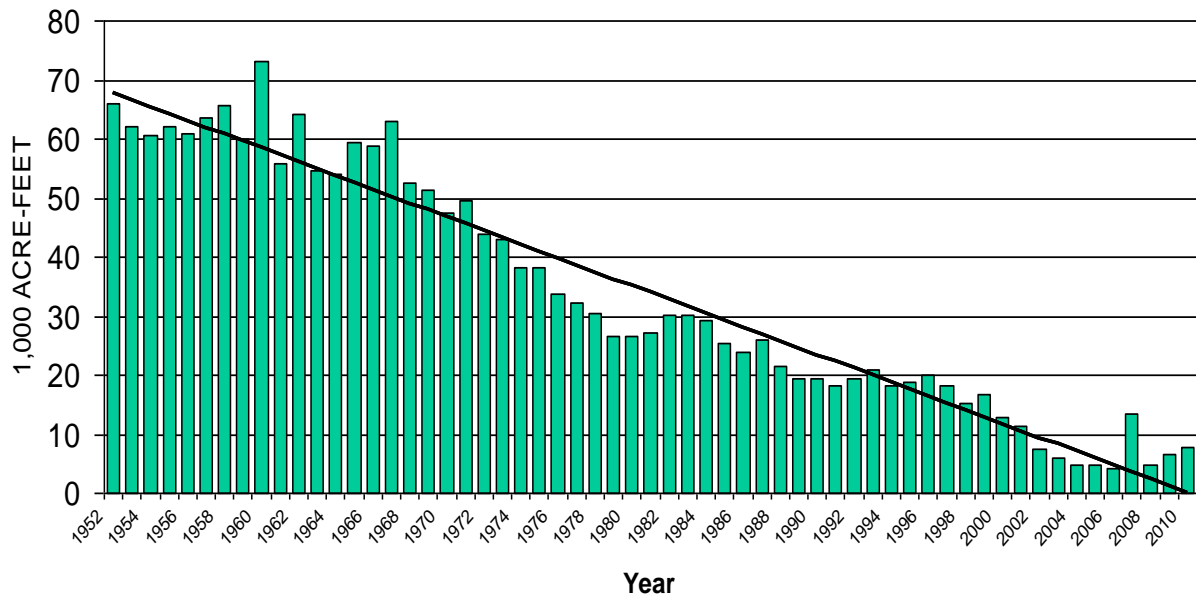
Catch rate of channel catfish continued a downward trend in 2010.  
 Mean length of sampled channel catfish in 2010 was 15".  
 Approximately 9,000 – 10" channel catfish are requested for stocking  
 in 2011.

**Master Angler Awards, Enders Reservoir 1999-2009 (2010 data not yet available)**

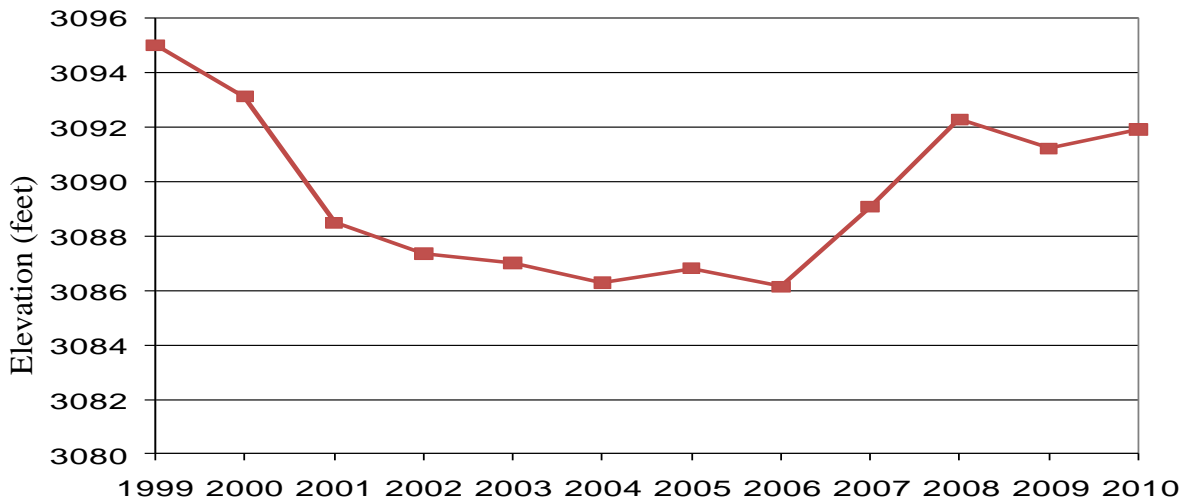


While the numbers of master angler awards given may not necessarily represent the true number of large fish caught (but not reported), the information is often useful for evaluating catch trends. In 2009, there was one channel catfish and one hybrid striped bass reported for master angler awards from Enders.

## Enders, Yearly Historical Inflow 1952-2010



## Average Elevation, Enders Reservoir 1999-2010

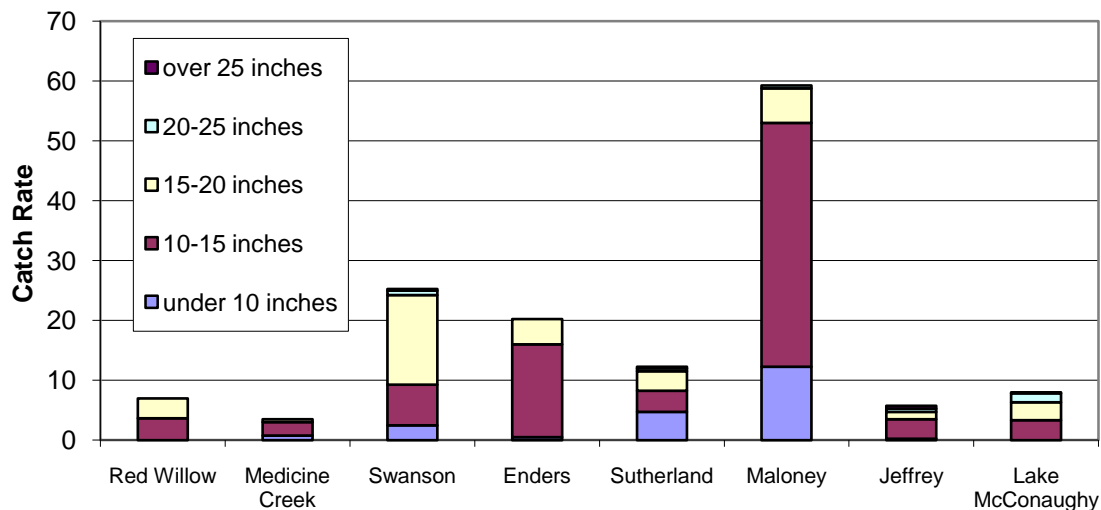


Water levels remain a management concern and contribute to reduced habitat quality, recreational opportunities, and fishing quality at Enders Reservoir. Since 2008, water levels have been slowly creeping upward. Currently the reservoir is operating at a low but stable level and has not released water for irrigation use since 2002. NGPC's 2010 fish population survey data may indicate a lingering benefit from the increased water levels that occurred from 2006 to 2008.

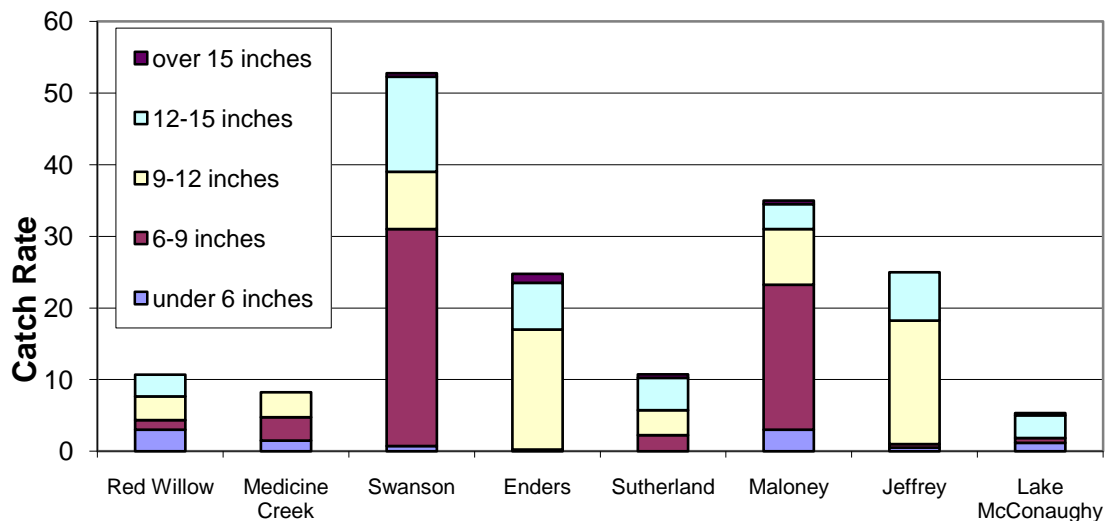
# Southwest District Reservoir Standard Survey

## Comparisons from 2010 Gill Net Data

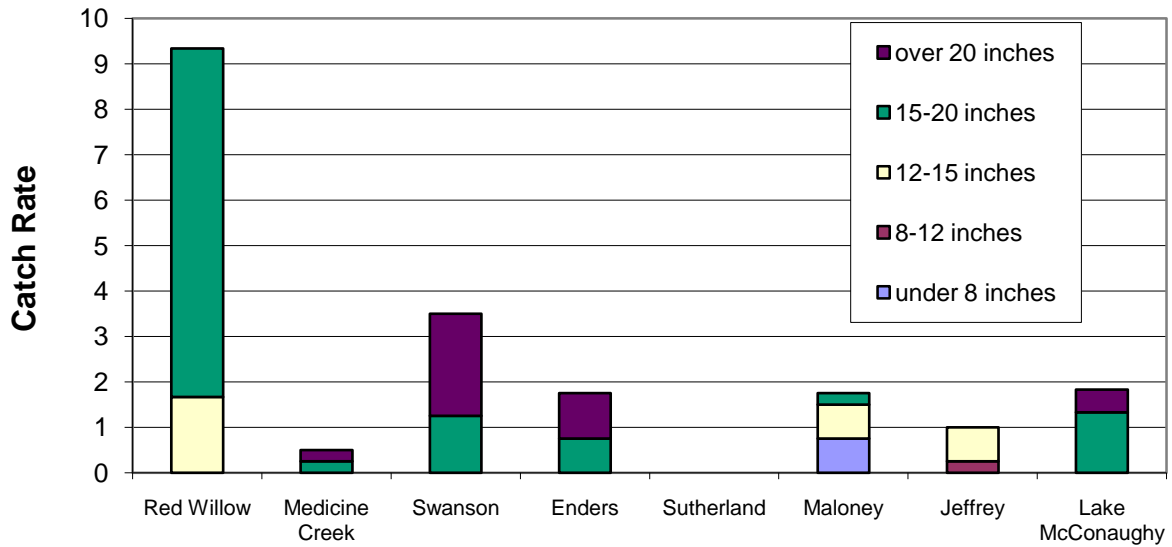
### Walleye



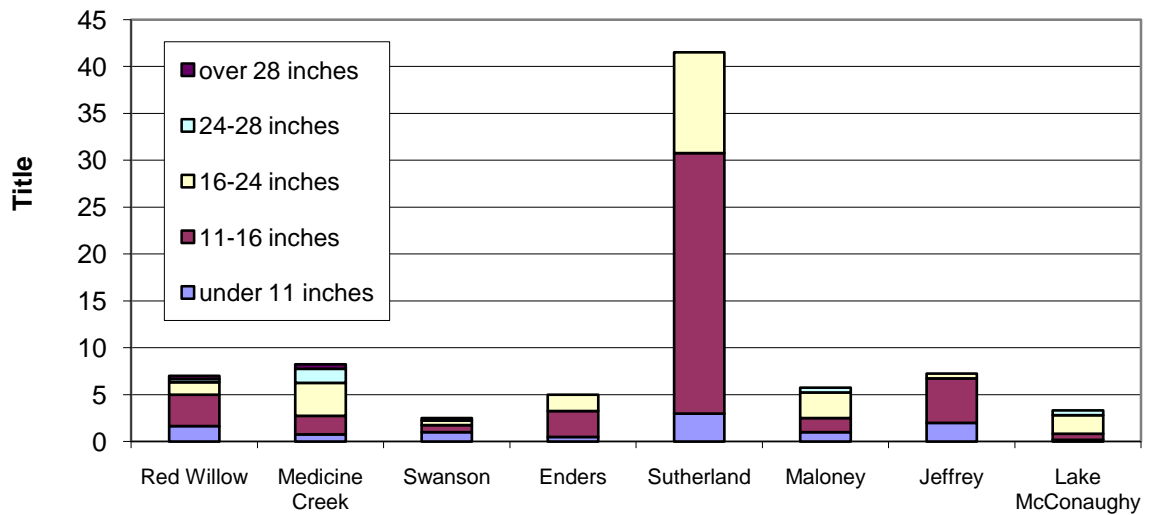
### White Bass



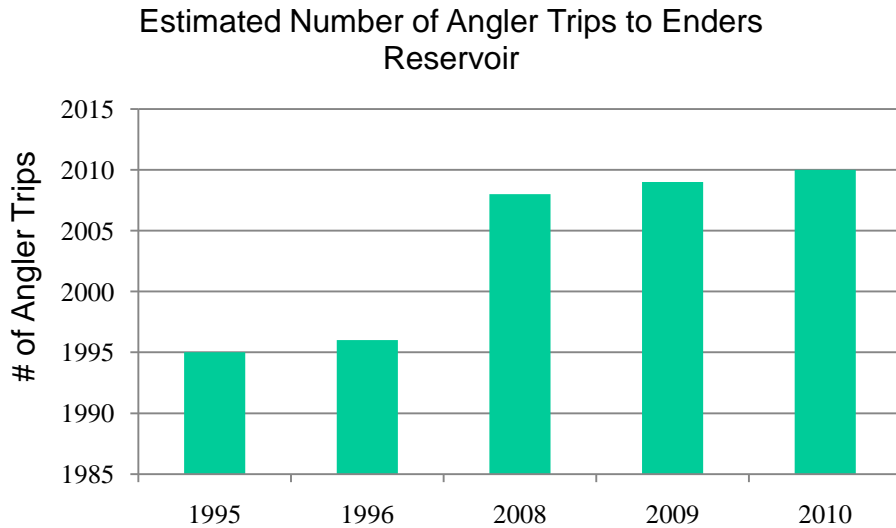
## Hybrid Striped Bass



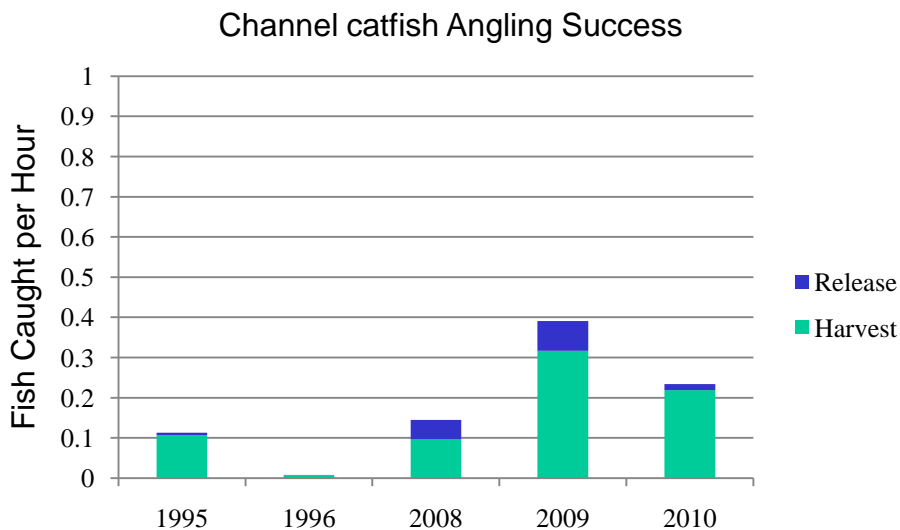
## Channel catfish



# 2010 Angler Survey Summary



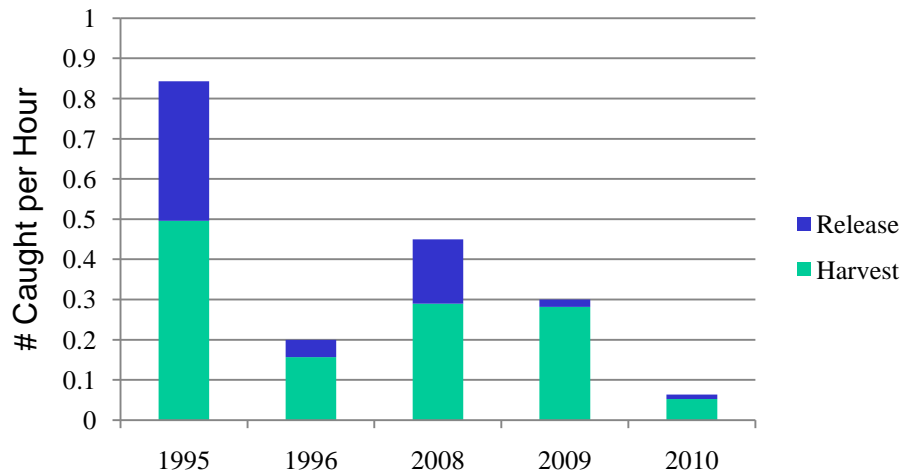
An estimated 4,872 anglers fished Enders during the seven month angler survey period in 2010. They spent approximately 14,284 hours with the average trip lasting 2.9 hours. Of these anglers, 54% sought any species, 29% walleye 10% sought channel catfish, 5% white bass and 1.6% largemouth bass. Of interviewed anglers, 43% were from Nebraska, 46 % from Colorado and 11% from Kansas.



Angling success is measured as the number of channel catfish caught per hour by anglers identifying themselves as channel catfish anglers. These anglers had fair success in 2010. Approximately 0.23 were caught per hour of channel catfish angling pressure. Approximately 1,000 were harvested and 500 were released. Harvested channel catfish averaged 18".

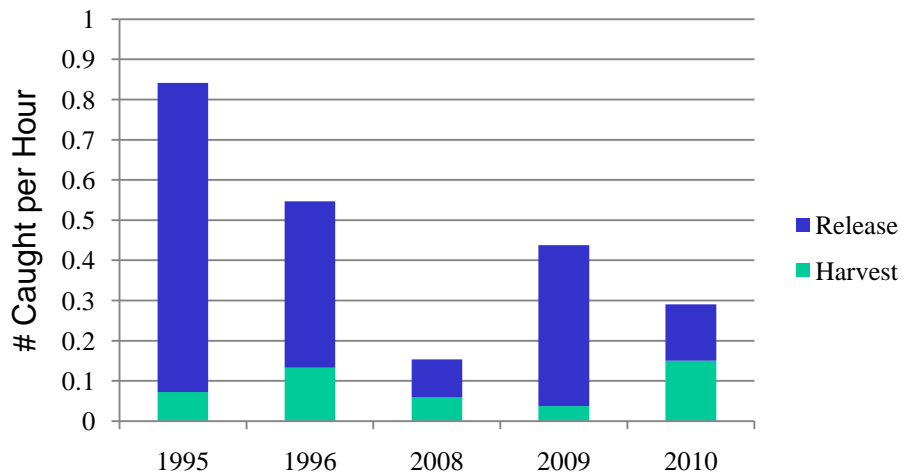


### White bass Angling Success



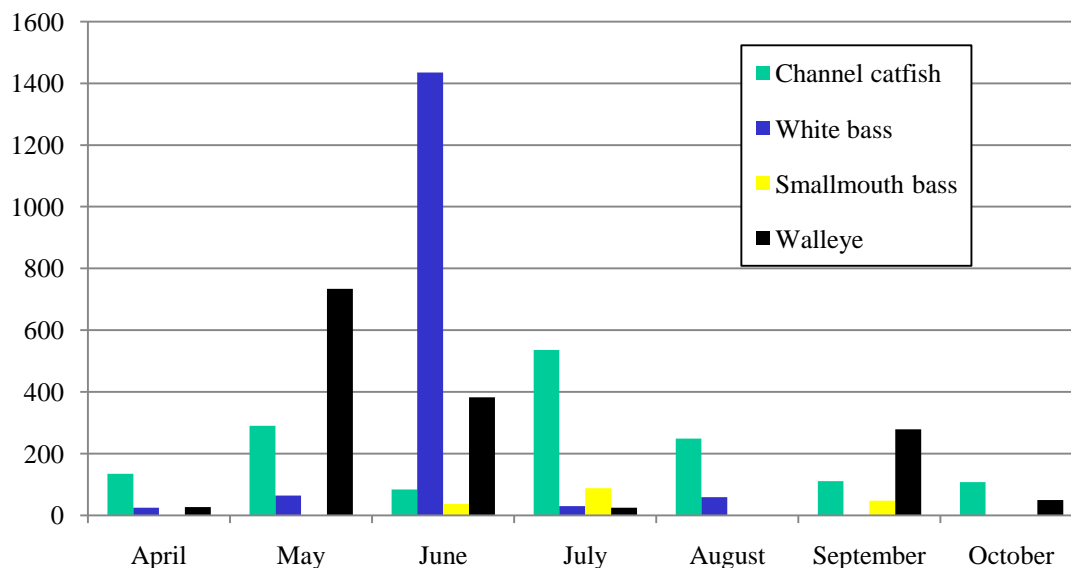
Angling success is measured as the number of white bass caught per hour by anglers identifying themselves as white bass anglers. White bass anglers had decreased success in 2010. Approximately 0.06 were caught per hour of white bass angling pressure. Approximately 349 were harvested and 1,263 were released. Harvested white bass averaged 12".

### Walleye Angling Success



Angling success is measured as the number of walleye caught per hour by anglers identifying themselves as walleye anglers. Walleye anglers experienced decreased catch rates in 2010 but the number of harvestable walleye caught was much increased with approximately 895 harvested and 600 released in 2010.

## Angler Catch by Month



Anglers caught channel catfish during every month of the angler survey but the largest quantity was caught during July. White bass were caught predominately in June. Smallmouth bass were caught in low quantities during June, July and September. The majority of walleye were caught during May and June with a Fall bite evident during September.

For additional information on fisheries management at Enders Reservoir contact:

Darrol Eichner, Biologist 308-284-8803, [darrol.eichner@Nebraska.gov](mailto:darrol.eichner@Nebraska.gov)

Caleb Huber, Biologist 308-535-8025, [caleb.huber@Nebraska.gov](mailto:caleb.huber@Nebraska.gov)

Jared Lorensen, Biologist 308-535-8025, [jared.lorensen@Nebraska.gov](mailto:jared.lorensen@Nebraska.gov)

Mark Staab, Cons. Tech. 308-535-8025, [mark.staab@Nebraska.gov](mailto:mark.staab@Nebraska.gov)